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Research Development

1987 Laboratory of the Year

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Research & Development

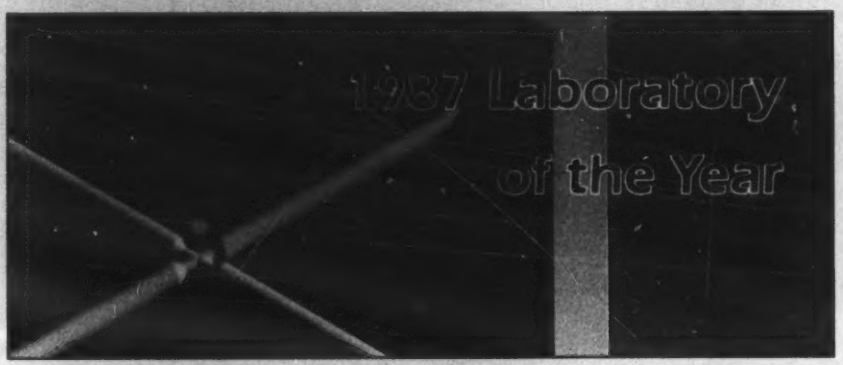
May 1987/Vol. 29/No. 5

SERVING THE $235-BILLION WORLDWIDE R&D INDUSTRY

Research & Development

The magazine with the R100 Awards

Expect the best in your new R&D lab. See p 78.



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ABOUT THE COVER

Designers and planners of *R&D's* 1987 Lab of the Year wanted to project a positive company image to the community, to encourage communication among the center's workers, to provide a safe environment that takes advantage of the site and enhances productivity, and to permit expansion and change to meet future needs.

Chevron's Ortho Research Center in Richmond, CA, is the Lab of the Year. The Metro Environmental Laboratories, operated by the Municipality of Metropolitan Seattle, WA, and Alberta Research Council's new lab in Edmonton, AB, are High Honors Laboratories.

An article describing the facilities begins on p 78.

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OPINION POLL RESULTS

Thermodynamic and spectral reference data most needed

THERMODYNAMIC and kinetic data got the highest vote in our survey of the needs of readers for reference data. Molecular spectral data (IR, Raman, NMR) came in a close second, both far ahead of atomic spectral data and mass spectral data.

The survey was conducted in cooperation with the Joint Committee on Atomic & Molecular Physical Data chaired by J.E. Griffiths of Bell Laboratories. The subject did not get a large response from readers. The 626 responses are a small fraction of our usual number.

Tabulation of the responses follows. Responses will be made available to the committee for additional processing.

1. Which kind of reference data is most important in your current job?
- a. Thermodynamic and kinetic data 29%
- b. Molecular spectral data (IR, Raman, NMR) 27
- c. Atomic spectral data 8
- d. Mass spectral data 10%
- e. Other 26

2. Do you prefer compilations of data available from:
- a. Computer-readable file ... 40%
- b. Hard-bound book 36
- c. Loose-leaf ... 21%
- d. Microfiche .. 3

3. What is your most pressing need for spectroscopic data?
- a. Organic compounds 37%
- b. Inorganic compounds 27
- c. Polymers 17%
- d. Other 14
- e. No need 5

4. What is your most pressing need for reference materials?
- a. Organic compounds 35%
- b. Inorganic compounds 28
- c. Polymers 20%
- d. Other 17

5. Where do you see the greatest need for improvement during the next decade?
- a. Standard reference materials 22%
- b. Evaluate reference compilations 33
- c. Instrumentation 24
- d. Quality of data accepted for publication 21

6. What is your most useful source for physical properties?
- a. J. Phys. & Chem. Reference Data 17%
- b. JANAF Thermochemical Tables 6
- c. NBS Chem. Thermodynamic Data Base 8
- d. Primary journals 36%
- e. Other 33

7. What is your most useful source for infrared spectral data?
- a. Coblentz Society IR Ref. spectra deskbook 2%
- b. Sadtler IR Spectra collections 23
- c. CRC Press Atlas of Spectra collections 12
- d. Aldrich IR Data compilation 13
- e. Internal data bases or other 27
- f. No need 23

8. What is your most useful data source for NMR data?
- a. Sadtler NMR data compilation 14%
- b. Aldrich NMR data compilation 12
- c. Varian NMR data collection 10
- d. NIH/EPA data compilation 3
- e. Internal data sources or other 26
- f. No need 35

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